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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet 1 of

Complete if Known					
Application Number	10/054,164				
Filing Date	January 22, 2002				
First Named Inventor	Kevin J. Knight				
Group Art Unit	2141				
Examiner Name	Kenneth R. Coulter				
Attorney Docket Number	24544.01				

U.S. PATENT DOCUMENTS

Examiner nitials	Cite No.1	U.S. Patent Docume Number (If know	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	
VAL		2001/0050690A1	Giles et al.	12-2001		
*1		2001/0031102A1	Lunetta et al.	10-2001		
++		3,987,243	Schwartz	10-1976		
1		4,261,012	Maloomian	04-1981	RECEIVE	D
+		4,276,570	Burson, et al.	06-1981	TIE OLI TE	
\neg		4.297.724	Masuda, et al.	10-1981	4 4 200	2
11		4,482,960	Pryor	11-1984	JUL 1 1 20 0	JJ
1		4.486.774	Maloomian	12-1984		
-1-1	-	4,539,585	Spackova, et al.	09-1985	Technology Cente	210
- - 		4,602,280	Maloomian	07-1986		
-		4,617,592	MacDonald	10-1986		
\rightarrow		4.675.725	Parkyn	06-1987		
\top		4,706,075	Hattori et al.	11-1987		
+		4,713,695	Macheboeuf	12-1987		
11		4,730,260	Mori, et al.	03-1988		
		4,731,743	Blancato	03-1988		
11		4,769,700	Pryor	09-1988		
		4,778,851	Henton et al.	10-1988		
		4,821,118	Lafreniere	04-1989		
		4,868,552	Chang	09-1989		
TT		5,060,171	Steir, et al.	10-1991		
T	į.	5,109,272	Kinoshita et al.	04-1992		
		5,130,801	Yamaguchi	07-1992		
7 1		5,140,314	Stansfield et al.	08-1992		
		5,202,837	Coe et al.	04-1993		
		5,247,610	Oshima, et al.	09-1993		
		5,273,038	Beavin	12-1993		
7		5,283,560	Bartlett	02-1994		
		5,357,439	Matsuzaki et al.	10-1994		
$\neg \neg$	- 1	5,357,601	Kagawa	10-1994		
	- (5,383,111	Homma et al.	01-1995		
I		5,479,597	Fellous	12-1995		
4	- 1	5,490,080	Jarrige et al.	02-1996		
	- 1	5,495,568	Beavin	02-1996		

Examiner Signature Kenneth M. Lulle	Date Considered 19/16/05
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Sheet 2 of 5

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First Named Inventor	Kevin J. Knight				
Group Art Unit	2141				
Examiner Name	Kenneth R. Coulter				
Attorney Docket Number	24544.01				

U.S. PATENT DOCUMENTS

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5,598,224 Choi 01-1997 5,614,945 Sekine et al 03-1997	
5,598,224 Choi 01-1997 5,614,945 Sekine et al 03-1997	
5,614,945 Sekine et al 03-1997	
5 COD 500 Venture 10 1007	
5,680,528 Korszun 10-1997	
5,689,562 Hassan et al. 11-1997	RECEIVE
5,745,661 Koh, et al. 04-1998	· ILOLIVL
5,805,237 Nakatani et al. 09-1998	
5,845,261 McAbian 12-1998	JUL 1 1 200
5,850,222 Cone, D. 12-1998	_
5,852,447 Hosoya et al. 12-1998	Technology Center 2
5,862,218 Steinberg, Eran 01-1999	
5,870,771 Oberg, Larry B. 02-1999	
5,880,740 Halliday et al. 03-1999	
5,920,685 Romano et al. 07-1999	
5,956,737 King et al. 09-1999	
5,966,310 Maeda et al. 10-1999	
5,970,471 Hill 10-1999	
5,982,350 Hekmatpour et al. 11-1999	
5,986,670 Dries et al. 11-1999	
6.023,679 Acebo et al. 02-2000	
6,026,215 Fantone et al. 02-2000	
6,026,371 Beck et al. 02-2000	
6,083,267 Motomiya et al 07-2000	
6,144,388 Bornstein, Raanan 11-2000	
6,195,101 Ghislain Bossut et al. 02-2001	
6,281,874 Sivan et al. 08-2001	
6,285,381 Sawano et al. 09-2001	
6,307,568 Rom, E. 10-2001	
6,341,350 Miyahara et al. 01-2002	
6,344,853 Knight, Kevin J. 02-2002	
MC 6,353,770 Ramsey et al. 03-2002	

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Filing Date	January 22, 2002				
First Named Inventor	Kevin J. Knight				
Group Art Unit	2141				
Examiner Name	Kenneth R. Coulter				
Attorney Docket Number	24544.01				

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 -	iak	+		6 256 220		Enemate lun	03-2002	
H	Щ	+		6,356,339 6,388,654		Enomoto, Jun Platzker et al.	05-2002	
Ė	+	+-		6,392,659		Ohki et al.	05-2002	
\vdash	+	╅		6,414,693		Berger et al.	07-2002	RECEIVED
I	十	十		6,483,540		Akasawa et al.	11-2002	
	\top	十		6,493,677		von Rosen et al.	12-2002	.111. 1 1 2003
1	¥			6,496,744		Cook, David Philip	12-2002	
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MC			EP 0414222			04-1996		Π
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			JP 6027933			02-1994		
			JP 6118923			04-1994		
			JP 62166475			07-1987		
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			PPI ICANT	First Named Inventor	Kevin J. Knight		
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	nials	ner	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²
)	lц	C		VAN GELDER, A., "Doing it with mirrors; low budget stereo graphics", The International Society for Optical Engineering, vol. 2178, 1994, pp. 68-77.	
				VINOGRADOV, K.M., "Some problems arising during the construction of a three-dimensional model of artificial and natural objects by means of computer", Soviet Journal of Optical Technology, vol. 58, NO. 11, Nov. 1991, pp. 746-749.	
				The Virtual Family Bragbook (www.noteworthydesigns.com).	
	\int			Vistech Home Page (www.mrangel.com).	
				WEILI, R., "BGI bitmap image overlay processing", Min-i-Micro Syst. (China), vol. 14, No. 6, 1993, pp. 38-41.	
				Macromedia Press Release, April 14, 1998	
	₩ U.	C		Macromedia Press Release, August 17, 1998	
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